

Application No. 10/972,203  
*Amendment dated April 14, 2005*  
 Page 12

### REMARKS/ARGUMENTS

Applicants thank the Examiner for granting the time to conduct an interview in this application, which was conducted on April 13, 2005. Preliminarily, the rejection of claims 23-24, and 26-29 was rendered moot in discussions with the Examiner, and these claims were indicated as allowable (see Interview Summary). New claims 53-58 have been added. Support for these claims may be found throughout the specification. Upon entry of the above amendments, claims 1-58, as amended, will be pending. Claims 1, 21, 23, 30, 33, and 36 are independent.

Claims 16-17 have been rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

Claims 1-4, 7-9, 12-20 and 30-52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable in view of U.S. Patent No. 6,136,880 to Snowwhite *et al.* (Snowwhite 1). Claims 1-4, 8-9, 12-16, 19-20 and 30-52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable in view of U.S. Patent No. 6,359,025 to Snowwhite *et al.* (Snowwhite 2). Claims 1, 3-4, 8-9, 13-20, and 30-52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,057,034 to Yamazaki *et al.* (Yamazaki). Claims 1, 3, 8, 10-20 and 30-52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,782,129 to Moschovis *et al.* (Moschovis).

With respect to claims 16-17, excerpts from Tables 7 and 8 of the present application detail compositions that fall within these claims as presented below:

Table 7 (Excerpt)

Components	Comp. Ex. D	Ex. 10
Oligomer 7 (wt. %)	56.00	56.00
Propoxylated nonyl phenol acrylate (wt. %)	36.50	38.00
Irgacure 184 (wt. %)	6.00	2.00
Irgacure 1700 (wt. %)	--	--
Lucirin TPO (wt. %)	--	0.50
Darocur 1173 (wt. %)	--	2.00
Irganox 1035 (wt. %)	1.00	1.00
A-189 (wt. %)	0.49	0.49
A-1110 (wt. %)	0.01	0.01
% RAU (4.4 mJ/cm <sup>2</sup> )	58.3	67.9

Table 8 (Excerpt)

Components	Comp. Ex. E	Ex. 12
Oligomer 8	35.00	35.00
Oligomer 9	35.00	35.00
Hexane diol diacrylate	24.995	25.995
Irgacure 184 (wt. %)	4.00	1.00
Lucirin TPO (wt. %)	--	0.70
Irgacure 819 (wt. %)	--	0.3
Darocur 1173 (wt. %)	--	1.00
Irganox 1035 (wt. %)	1.00	1.00
DC 57 (wt. %)	0.005	0.005
% RAU (4.4 mJ/cm <sup>2</sup> )	50.9	66.8

Application No. 10/972,203  
Amendment dated April 14, 2005  
Page 13

The Table 7 and 8 excerpts illustrate the unexpected results of faster cure speed using multi-photoinitiators when compared to an equal or greater amount of 1-hydroxy-cyclohexyl-phenyl ketone in substantially identical compositions. As intended by the discussion on page 38 of the application, and further exemplified in these excerpts, the actual formulations that are compared, although identical, necessarily may differ slightly to compensate for situations where the total wt.% of 1-hydroxy-cyclohexyl-phenyl ketone in the comparative composition is greater than the total wt.% of photoinitiator in the multi-photoinitiator composition. This is shown in the substantially identical compositions of Comparative Example D vs. Example 10 and Comparative Example E vs. Example 12. The total wt.% of 1-hydroxy-cyclohexyl-phenyl ketone in Comparative Examples D and E is 33% greater than the total wt.% of photoinitiators in their corresponding substantially identical inventive Examples 10 and 12 which cure faster. This difference in total wt% is compensated for by increasing the amount of acrylate diluent in inventive Examples 10 and 12. For at least these reasons, it is submitted that claims 16-17 are in full compliance with 35 U.S.C. §112.

Similarly, with respect to the rejections of claims 1, 30, 33, and 36 (and their dependents), exemplified by Example 10 and/or 12 above, none of the cited art (Snowwhite 1, Snowwhite 2, Moschovis, and Yamazaki) discusses the unexpected results of increased cure speed of multi-photoinitiator compositions. For at least these reasons claims 1, 30, 33 and 36 and their dependents are patentable over the cited art.

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Application No. 10/972,203  
Amendment dated April 14, 2005  
Page 14

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

MAYER BROWN ROWE & MAW LLP

By: 

John E. Mauk  
Registration No. 54,579  
Direct No. (202) 263-3255

Paul L. Sharer  
Registration No. 36,004  
Direct No. (202) 263-3340

PLS/JEM  
Intellectual Property Group  
1909 K Street, N.W.  
Washington, D.C. 20006-1101  
(202) 263-3000 Telephone  
(202) 263-3300 Facsimile

Date: April 14, 2005